Cost Management

AUTODESK® BIM 360®

AUTODESK.

Introduction

Tracking costs, managing risk, and keeping a project on budget can be one of the biggest hurdles in a construction project, and finding efficiencies in this area can make all the difference in delivering a project on time and on budget.

But with the new BIM 360 Cost Management module bringing powerful cost control, change management, and pay application workflows to the BIM 360 platform teams can minimize risk by managing all cost related construction activities in a single software.

The following guide introduces the BIM 360 suggested cost management workflow and gives context to the different capabilities built into the product, including step-by-step starter guides.

Autodesk BIM 360

BIM 360 improves the process of construction by supporting informed decision making throughout the project lifecycle. It does this by centralizing all project data in a single data repository and connecting project stakeholders and workflows— from design to construction to operations, from the field to the office and back.

Visit BIM 360 Site 💡

Please note that the capabilities outlined in this guide are reflective as of January 2020 and will continue to undergo improvements. Additionally, some capabilities are only available in certain countries. For more information on product updates and capabilities please visit the [BIM 360 Product Release Notes](.)

Table of Contents

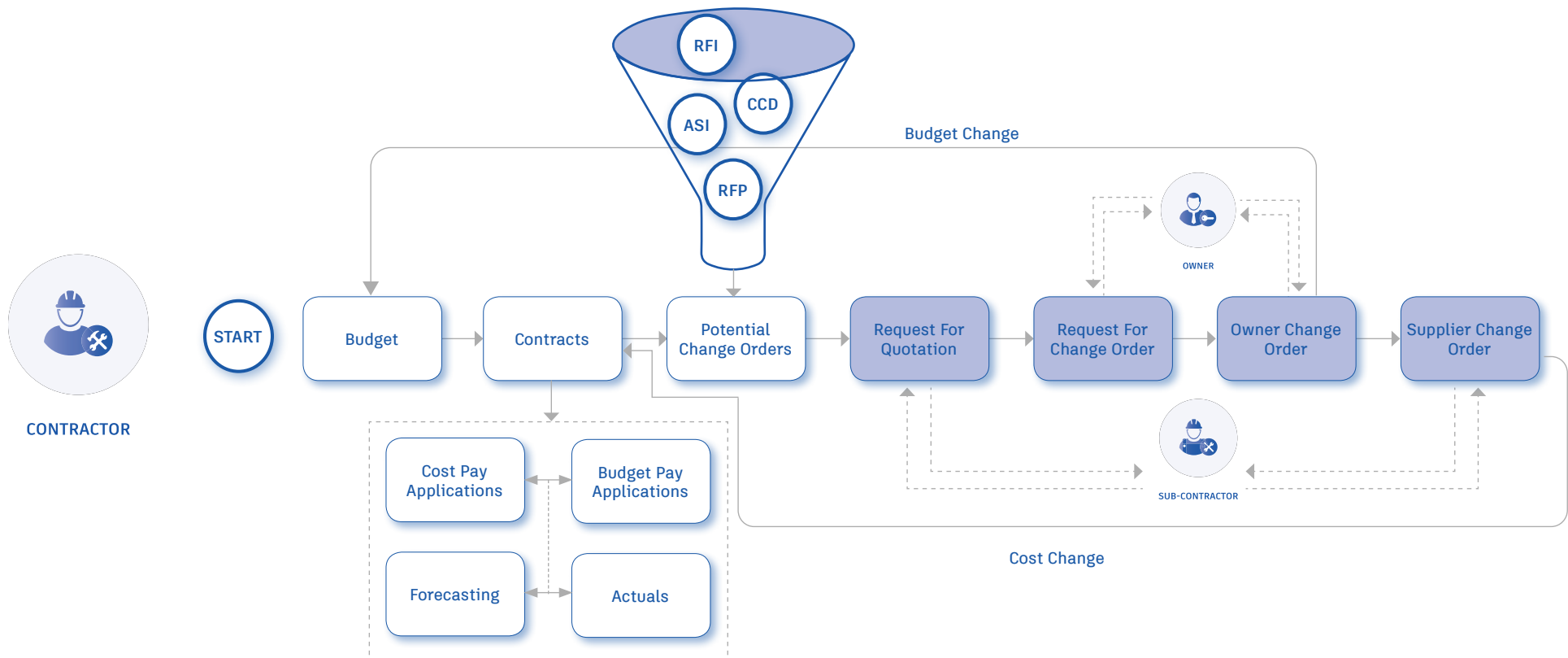# Suggested Workflow

Cost Management Workflow

Used to help control cost and confirm all changes are accounted for and managed effectively to maintain positive cash flow, reduce risk and maximize profit. The graphic below outlines the suggested cost management workflow using BIM 360.

Why follow this workflow?

- Customizable to suit users needs and preferences
- Provides a real-time summary view of all budget items and contracts
- Streamlines upstream and downstream change order workflows

BIM 360 capabilities used

- Budget management
- Contract management
- Change mrder management
- Pay applications
- Forecasting
- Actuals

RFI

CCD

ASI

RFP

Budget Change

OWNER

CONTRACTOR

START

Budget

Contracts

Potential Change Orders

Request For Quotation

Request For Change Order

Owner Change Order

Supplier Change Order

Cost Pay Applications

Budget Pay Applications

Forecasting

Actuals

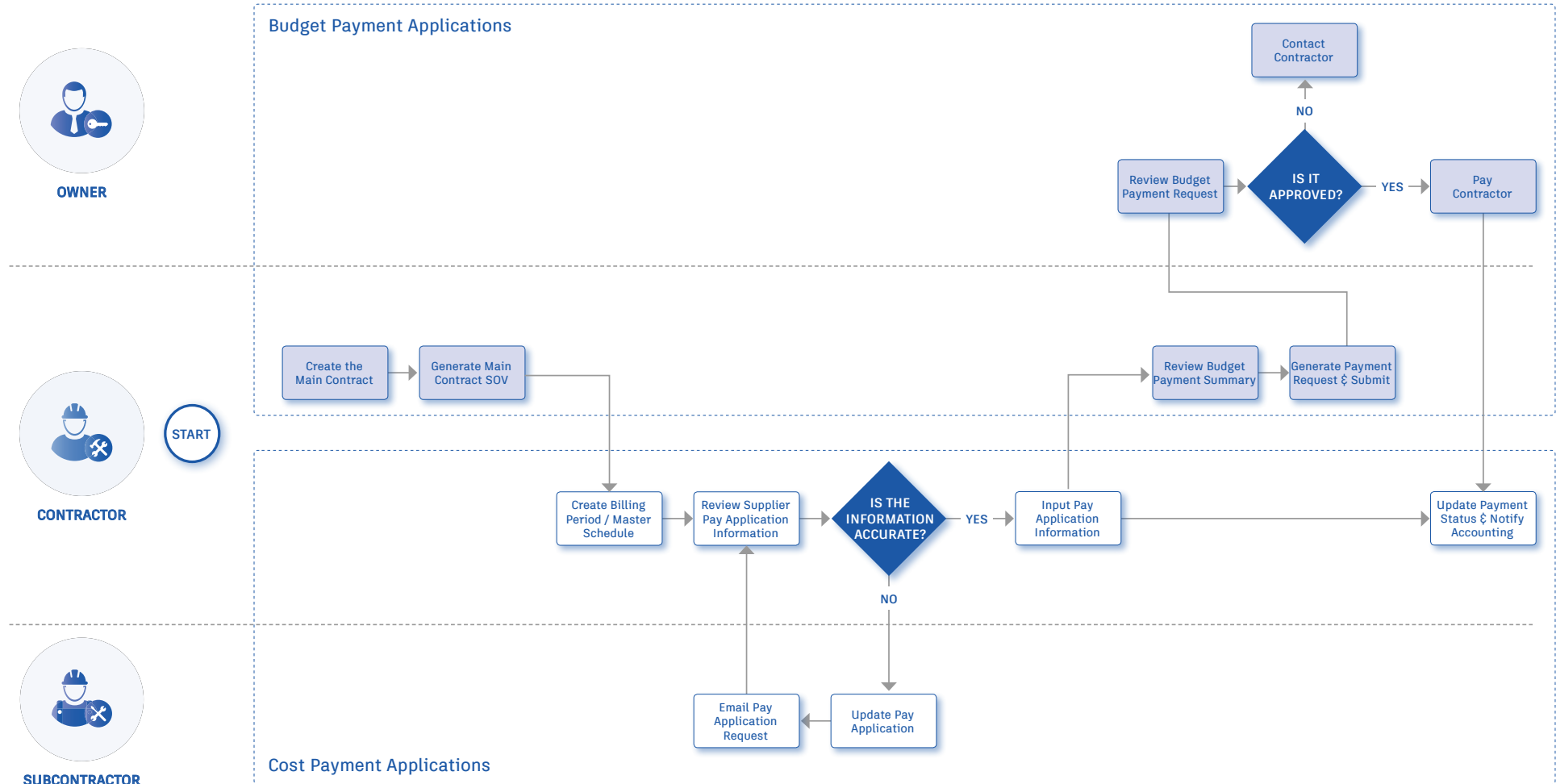SUB-CONTRACTOR

Cost Change

Pay Application Workflow

Used to help effectively manage incremental pay applications to automate tasks and gain a real-time view of the financial health of the project. The graphic below outlines the suggested pay application workflow using BIM 360.

Why follow this workflow?

- Adds a level of automation
- Easy to manage and track
- Provides a real-time summary view of all cost and budget payments

BIM 360 capabilities used

- Main contract & budget items
- Budget payment applications
- Cost payment applications

OWNER

CONTRACTOR

SUBCONTRACTOR

Budget Payment Applications

Contact Contractor

Review Budget Payment Request → IS IT APPROVED? — NO → Contact Contractor
IS IT APPROVED? — YES → Pay Contractor

Create the Main Contract → Generate Main Contract SOV

Review Budget Payment Summary → Generate Payment Request & Submit

START

Create Billing Period / Master Schedule → Review Supplier Pay Application Information → IS THE INFORMATION ACCURATE? — YES → Input Pay Application Information → Update Payment Status & Notify Accounting

IS THE INFORMATION ACCURATE? — NO → Update Pay Application → Email Pay Application Request

Cost Payment Applications

Cost Management Capabilities

Budget Code Setup

Cost Management is customizable to suit your needs and preferences including detailed hierarchical build ups, custom segment options, and master lists.

1   Activate the Cost Management Module

- A project admin needs to activate the Cost Management module.

- In the Project Admin module select the "Services" tab, then "Overview" on the left sidebar.

- In the Cost Management row, select "Activate" and designate at least one project admin.

PRO TIP: The Document Management module needs to be activated first.

Budget Code Setup

2   Budget Code Templates

The "Budget Code Setup" informs BIM 360 how the budget codes should appear in the Cost Management module. Within this tab, you can build the budget code format from scratch or by importing an excel list from an accounting system or similar. Only project admins can create budget code templates.

- In the Project Admin module, select the "Services" tab.

- On the left sidebar select "Cost Management" then "Budget Code Setup."

- Use the "Budget Code Template" field to label the template.

3   Creating Budget Segments
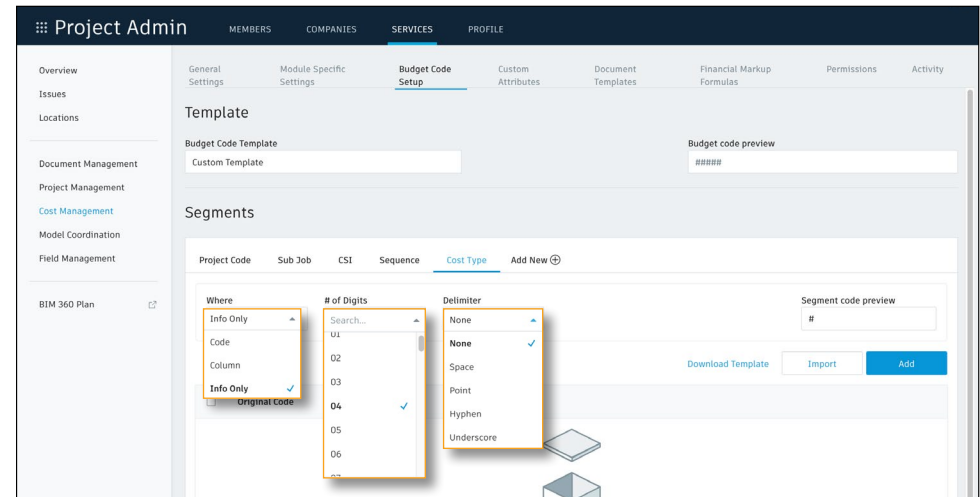
- In the Segment section select "Add New" and double-click to rename the segment.

- At a minimum there must be least one segment, but you can create as many segments as required.

- Click and drag the segment tabs to rearrange.

Budget Code Setup

4 Adding Budget Segment Details

- "Where" informs BIM 360 on how to show the segment:
  - **Code** - as part of the whole budget code.
  - **Column** - in a separate column from the budget code.
  - **Info only** - purely for information and not shown in the budget columns.

- "# of Digits" informs BIM 360 how many digits are expected for that segment.

- "Delimiter" informs BIM 360 how to separate the segments if at all.

PRO TIP: You can't edit segments when there are budget items in the project.

5 Adding Segment Values

- Segment values can be added individually by selecting "Add" or by importing a master list.

- When importing a master list you can either drag and drop or browse for an Excel sheet.

- When importing a list first down a template by clicking "Download Template."

- Hierarchy levels are unlimited. Child levels don't require a column header; just insert a column for each level of hierarchy.

- Note, every line item can only have one code.

Excel template:

Results in the budget code setup tab:

Example budget flyout view where you can see the benefits/results of the master lists import:

Download Setup Templates

Budget Code Setup

6 Code Preview

- The "Segment Code Preview" field allows you to input example data to confirm the segment code details are accurate.

- The "Budget Code Preview" displays a preview of the entire budget code as it will be shown in the Cost Management module.

- If you hover over the "Budget Code Preview" an "Input Code Preview" pops up to display the code as it might look when imported into Cost Management from your accounting system.

Custom Attributes

Quickly view detailed information behind any
cost activity with the details flyout panel.
With the Custom Attribute feature teams can
customize a portion of the details flyout panel
to suit their needs and preferences.

1 Accessing the Custom Attributes

- In the Project Admin module, select the "Services" tab.

- On the left sidebar select "Cost Management" then
  "Custom Attributes." Note, only project admins can create
  custom attributes.

- Custom attributes can be created for the following
  components:
  - Budget
  - Contract
  - Cost Item
  - PCO (Potential Change Order)
  - RFQ (Request for Quotation)
  - RCO (Request for Change Order)
  - OCO (Owner Change Order)
  - SCO (Supplier Change Order)

- Note, the component names can be customized within
  General Settings.

Terminology Reference

Custom Attributes

2 Creating a Custom Attribute

- To create a custom attribute, select the component.

- Either click to add or drag and drop the attribute from the left sidebar into the center preview panel.

- Then select the attribute and define the settings in the properties panel on the right

- Rearrange the attributes by clicking the six dots and dragging and dropping the field.

- Select "Finish" when done.
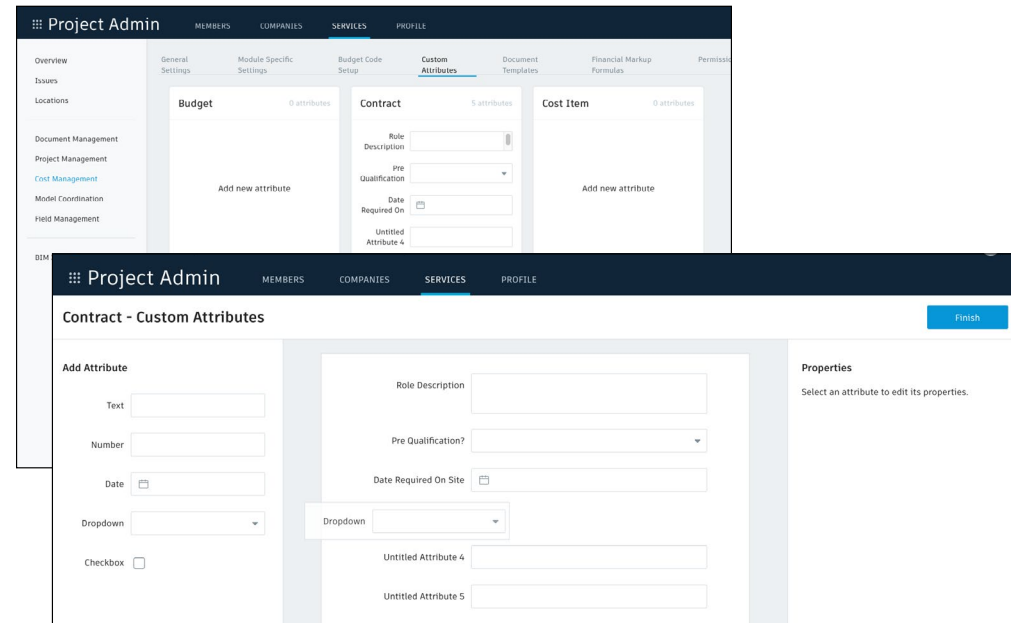
3 View Custom Attribute in the Details Flyout

- In the Cost Management module, select a cost activity line item. The details flyout will appear.

- In the details flyout select "Custom Attributes" from the top left drop-down list.

- This will display the custom attribute created in the Project Admin module.

PRO TIP: Add your custom attributes to the table view via the control icon. In the table view, you can assign them. You can also use custom attributes for grouping and filtering. To do this, select the filter icon and then choose the attribute from the Group Items By drop-down.
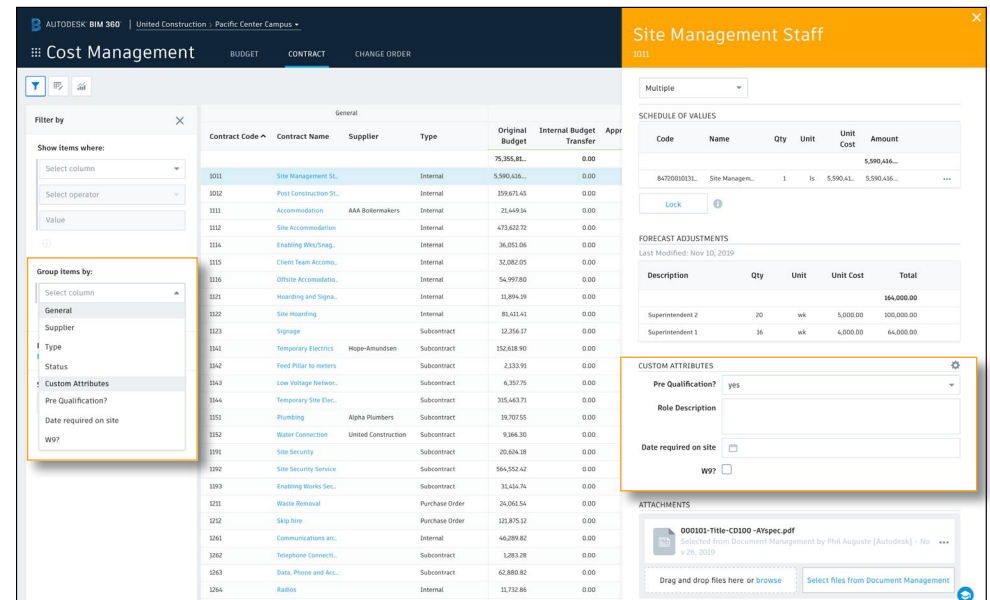
Document Templates

Easily create standard documentation formats for distribution during the change order, pricing request and approval processes with Cost Management's Document Templates capabilities. Templates are created using fields that are automatically populated directly from BIM 360 once a document is generated.

1 Accessing the Document Templates

- In the Project Admin module, select the "Services" tab.

- On the left sidebar select "Cost Management" then "Document Templates." Note, only project admins can manage the document templates.

- The document templates will be utilized in the Cost Management module when generating documents such as a supplier contracts.

- The component names in Document Templates (PCO, RFQ, RCO, OCO, SCO) can be customized within General Settings.

- There is no limit to the number of document templates that can be associated with each component.
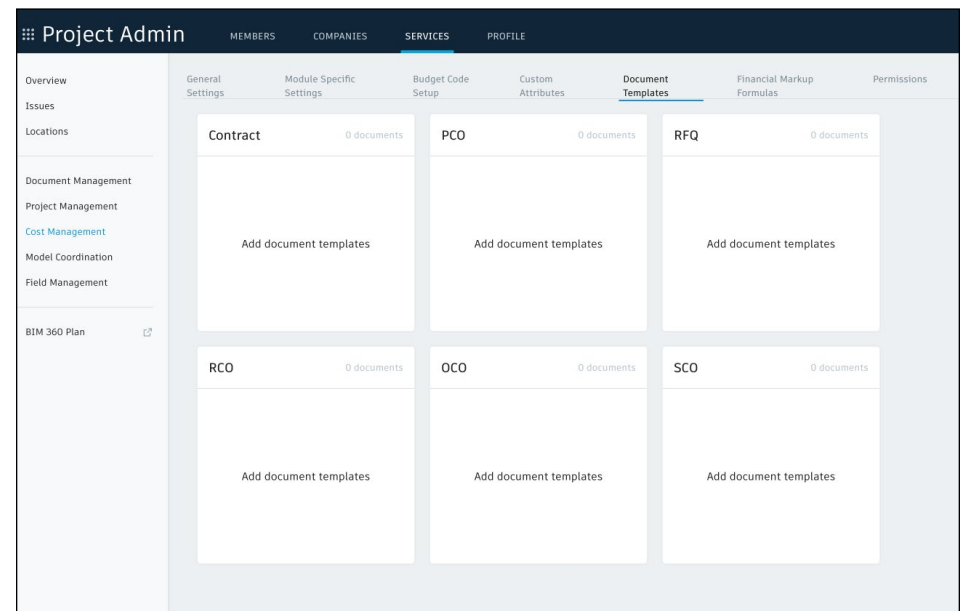
PRO TIP: Only Microsoft Word Documents are supported.

Document Templates

2 Downloading a Sample Template

- In Document Templates select the component you want to add a template to.

- Select "Download sample template" to download a Word template.

- The downloaded template can be customized to suit your needs. Note, the content within the brackets must stay the same for the module to recognize and to auto-populate it when generating the document.

- Once finalized, update the template name and save.

PRO TIP: To remove "SAMPLE" click into the document header.

Document Template Parameters
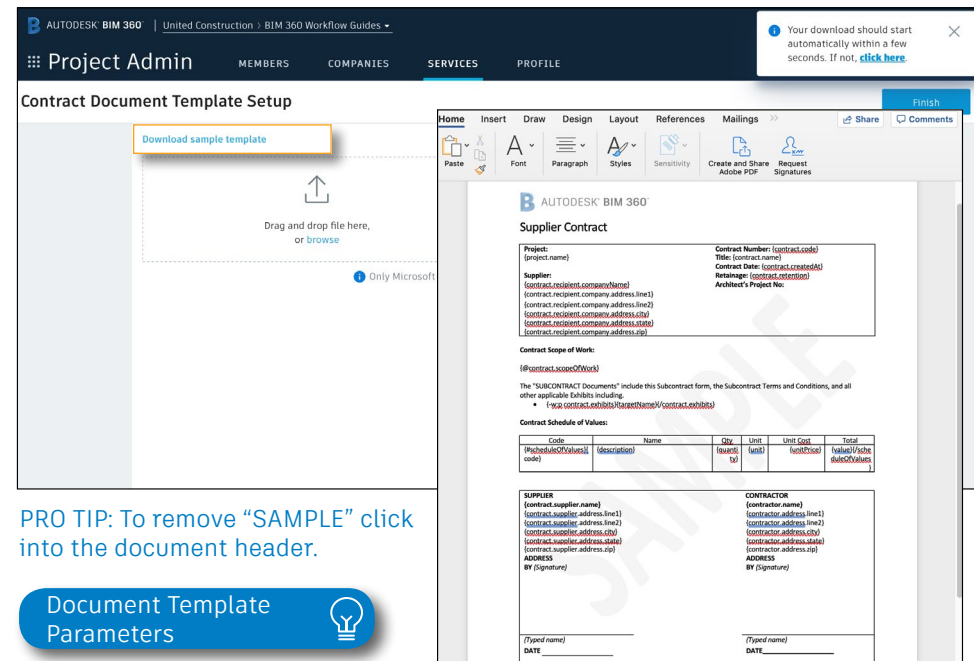
3 Uploading a Document Template

- There are two ways you can upload a document template:
  - **Option 1:** Drag and drop the file or click "browse" to locate the file to upload.
  - **Option 2:** Select a document from the BIM 360 Document Management module by clicking "Select from Document Management" and navigating to the correct folder.

- Select "Finish" to save and exit.
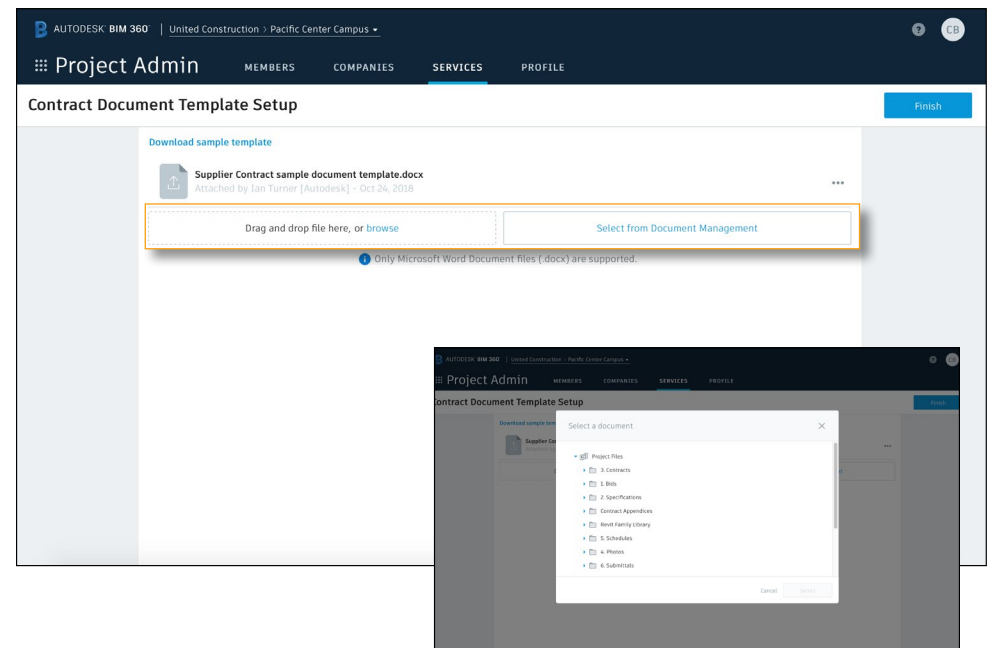
Module Specific Settings

In the Module Specific Settings tab teams have the option to configure the code format by customizing the prefix, suffix, number of digits and start number for each component.

1 Accessing the Module Specific Settings

- In the Project Admin module, select the "Services" tab.

- On the left sidebar select "Cost Management" then "Module Specific Settings." Note, only project admins can edit the module specific settings.

2 Module Specific Settings

- In the Module Specific Settings tab you have the option to configure the code format by customizing the prefix, suffix, number of digits, and start number for each component.

- The component names (Cost Item, PCO, RFQ, RCO, OCO, SCO) can be customized within General Settings.

- This will dictate how the information is displayed in the number column of each tab within the Cost Management module.

PRO TIP: For RFQs & SCOs check the "Include Contract Code in Prefix" box to provide relative codes per contract.
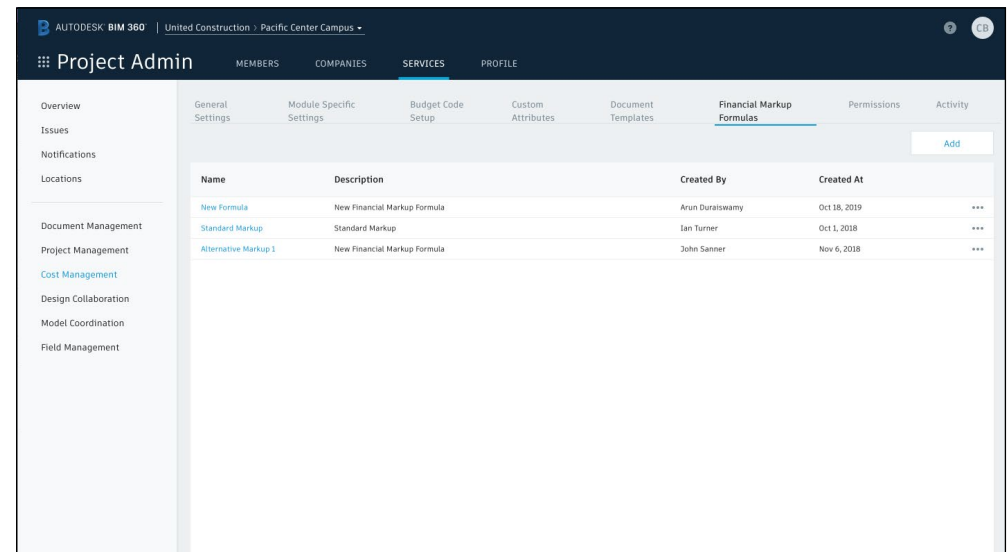
Financial Markup Formulas

Easily create multiple project level markup configurations to apply to Potential Change Orders (PCOs), Requests for Change Orders (RCOs) or Owner Change Orders (OCOs).

1 Accessing Financial Markup

- In the "Project Admin" module, select the "Services" tab.

- On the left sidebar select "Cost Management" then "Financial Markup Formulas." Note, only project admins can manage the markup formulas.

- Multiple markup formulas can be created and any existing formulas will be available in the list.

- The markups created here can then be applied to either PCOs, RCOs, or OCOs.

Financial Markup Formulas

2 Creating a Markup Formula

- In the "Financial Markup Formulas" tab select "Add."

- Select the top "New Formula" field to title the formula.

- To add a description select the pencil icon next to "New Formula Markup Formula."

- To enter a sample cost basis, which will allow you to check the calculation as you start building the formula, select the pencil icon next to "Sample cost basis."

- Creating the formula:

  1. Click "Markup" to add a new markup row to the formula or select "Markup" and drag it into the center preview panel.

  2. In the Markup edit panel name the markup (e.g. Fee).

  3. Select the markup type & amount:

     - "Percentage" for a standard percentage based markup.

     - "Flat" for a flat fee, per PCO.

  4. Select the "Cost Basis" from the drop-down.

  5. (Optional) add a description of the markup.

  6. Search or scroll to select a target budget item for the markup.

  7. By default, markups are calculated on all budget items. Using the "Calculate on" fields you can enter rules to only calculate on particular budget codes, cost types etc.

Financial Markup Formulas

8. Add a subtotal by selecting "Subtotal" or dragging it into the center preview panel.

- Name the subtotal (e.g. Contingency & Fee).

- Select the appropriate "Cost Basis Revising" option.

    - "Revise Cost Basis" (default) if revising the cost basis for all subsequent markups will be included.

    - "Info Only" to summarize any markups above for information

- Select "Save."

PRO TIP: Drag and drop markups and subtotals to rearrange if required.

General Settings & Permissions

It is essential to assign permission levels appropriately to ensure the right people have access to the right information. With the ability to set standardized permission controls, sharing information has never been easier. Once you finish setting up your original budget you can lock it to avoid accidental changes.

1 Accessing General Settings

- In the "Project Admin" module, select the "Services" tab.

- On the left sidebar select "Cost Management" then "General Settings." Note, only project admins can edit the general setting.

2 Editing the General Settings

1. **Unit of Measure** - select imperial or metric.

2. **Unit of Measure List** - set specific dimension as default of deactivate certain units from the list.

3. **RFQ (Request for Quotation) Response Due** - set the default response time frame for RFQs.

4. **Companies Setup** - identify the project Owner, General Contractor and Architect.

General Settings & Permissions

5. **Round Settings** - select the "Rule" (Half Up, Round Up, Round Down) and "Accuracy" (1, 0.1, 0.01, 0.05). In the example field you can test the settings.

6. **Budget & Cost Payment Application Retention:** allows you to put in a specific retention % for completed work and materials on site.

7. **Lock Budget** - once the original budget setup is finalized, you may lock it to avoid accidental change.

8. **Custom Tab Names** - allows you to change the default sub-tab names (Cost Item, PCO, RFQ, RCO, OCO, & SCO) that appear in the Change Order tab to better suit your needs.

9. **Contract Types** - use the "Add" button to create a list of contract types. In edit mode in the Contracts tab in the Cost Management module, you can assign a contract type to a line item via a drop-down.

10. **Cost Item Types** - use the "Add" button to create a list of cost item types. In the Cost Item tab within Change Orders in the Cost Management module, you can assign a cost item type to a line item via a drop-down list.

11. **PCO Types** - use the "Add" button to create a list of PCO types. In the PCO tab within Change Orders in the Cost Management module, you can assign a PCO type to a line item via a drop-down list.

12. **PCO Source Types** - use the "Add" button to create a list of PCO source types. In the PCO tab within Change Orders in the Cost Management module, you can assign a PCO source type to a line item via a drop-down list.

General Settings & Permissions

3 Setting Permissions

- Select the "Permissions" tab.

- Here you can designate user-, role-, or company-based permissions.

- Use the search field to find a user, company or role and click "Add."

- Permission levels are "view all" or "full control (editing)." Permission levels for can be different for each tab.

- To set permissions select the permission level under each column to access the menu drop-down.

Module Overview

Cost Management provides a real-time summary view of all budget items and contracts, giving a clear picture of revenue, costs, forecast and variance related to each item. This enables teams to minimize risk by managing all cost-related construction activities in a single software.

1 Budget Tab Overview Mode

Open the Cost Management module and select the "Budget" tab.

1. You can select the filter icon to open a flyout panel where you can create and save filters with multiple conditions.

2. The edit icon allows you to toggle between the overview and edit modes.

3. The chart icon allows you to turn charts on or off.

4. You can select the column headers to sort in ascending or descending order.

5. Column settings allows you to select the columns you wish to include in your view.

6. Export button allows you to export a nicely formatted budget report. It also provides the option to include additional historical data.
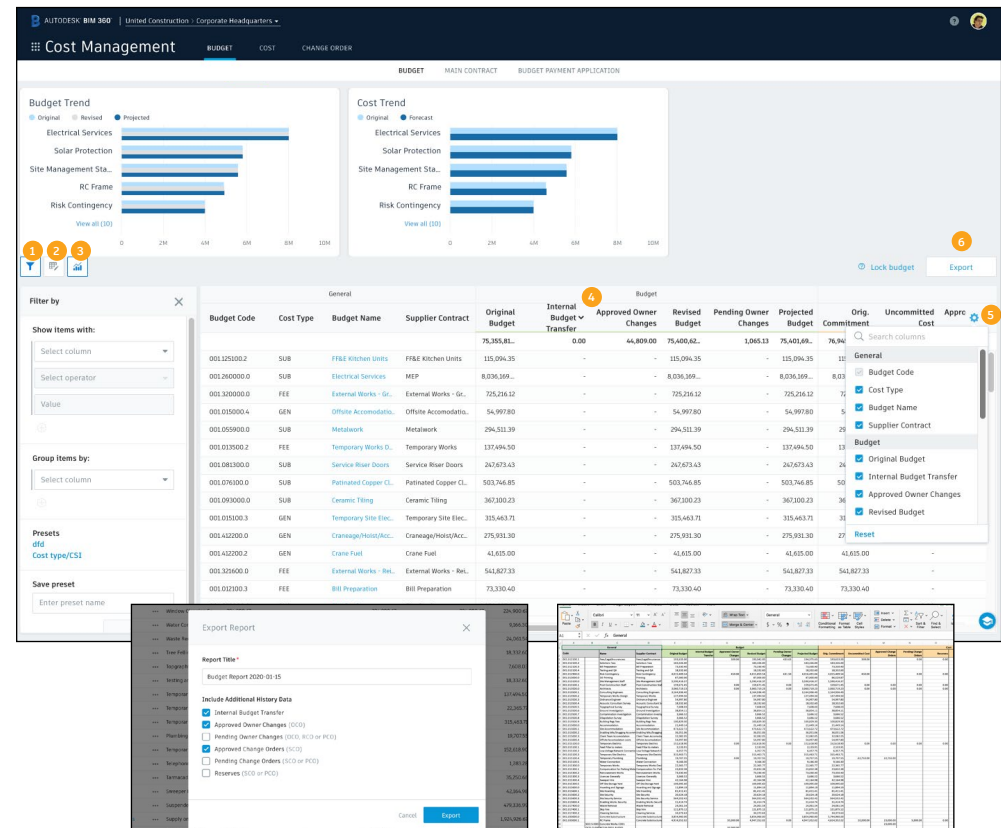
Module Overview

2   Budget Tab Edit Mode

In the Budget tab select the edit icon to enable the edit mode.

1. "Import" allows you to import an Excel file. It works the same as budget template creation.

2. "Add" allows you to manually enter new budget items.

3. Click within the Unit column to access a drop-down list of available units, assign the appropriate unit.

With a single budget item selected:

4. "Delete" allows you to delete the line item.

5. "Budget Transfer" allows you to do an internal transfer.

6. "Add Sub-Item" populates a new sub-item to fill in underneath the budget item.

   - There are no restriction on hierarchy levels, and the totals from all child items are rolled up to the parent and divided by the parent qty to provide a unit cost allowing visibility into how the budget number was derived.

7. Select the three dots to open a menu which also allows you to easily add a sub-item, do a budget transfer, or delete. But it also provides the option to make actual cost adjustments.

PRO TIP: If the user has view only permission they will have access to enter the edit mode. However, they will not have access to make edits.

Module Overview

3 Contract Tab Overview Mode

Open the Cost Management module and select the "Contract" tab. The contract overview works the same as the budget overview.

1. You can select the filter icon to open a flyout panel where you can create and save filters with multiple conditions.

2. The edit icon allows you to toggle between the overview and edit modes.

3. The chart icon allows you to turn charts on or off.

4. You can select the column headers to sort in ascending or descending order.

5. Export button allows you to export a contract report.

6. Column settings allows you to select the columns you wish to include in your view.
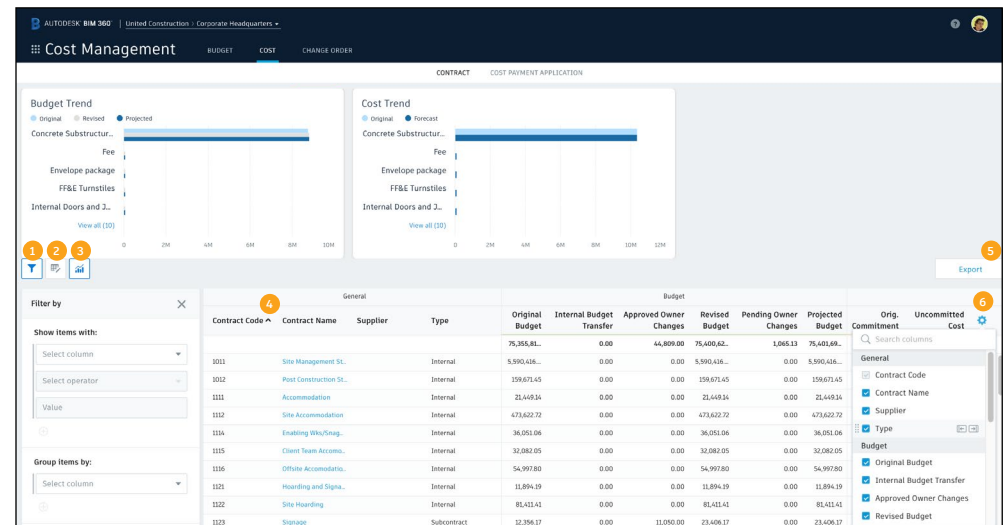
PRO TIP: Though some companies may have the same budget list as they do contracts, having both views is to facilitate having different lists even though the financial data adds up to the same total. This allows for contracts to be made of multiple budget codes and be able to be viewed either way.

4 Contract Tab Edit Mode

In the Contract tab select the edit icon to enable the edit mode. This works similarly to the budget edit mode.

1. "Import" allows you to import an Excel file.
2. "Add" allows you to manually enter a contract item.
3. "Export" allows you to export a contract report.
4. Click within the Type column to add a contract type to the line item.
5. Select the three dots to generate a document or delete a contract.
6. Select a contract name to open the details flyout panel.

The details flyout panel provides more information behind and can be edited. Use the drop-down to select the items to view in the flyout.

General:
- "Budget Code" provides a list of all unallocated budget items. Create the connection between contract and budget item by assigning from this list.
- Add a supplier and select "Generate" to generate a contract.

SOV (Schedule of Values):
- By default the SOV will inherit any budget item build ups from the connected budget item. They can be removed by right clicking if you want to create a different list of items.
- They can also be appended or edited and the values overwritten to create the correct award value for the contract.

Custom Attributes:
- Allows you to customize a section of the. Steps for creating a custom attribute can be found in the custom attributes section of this guide.
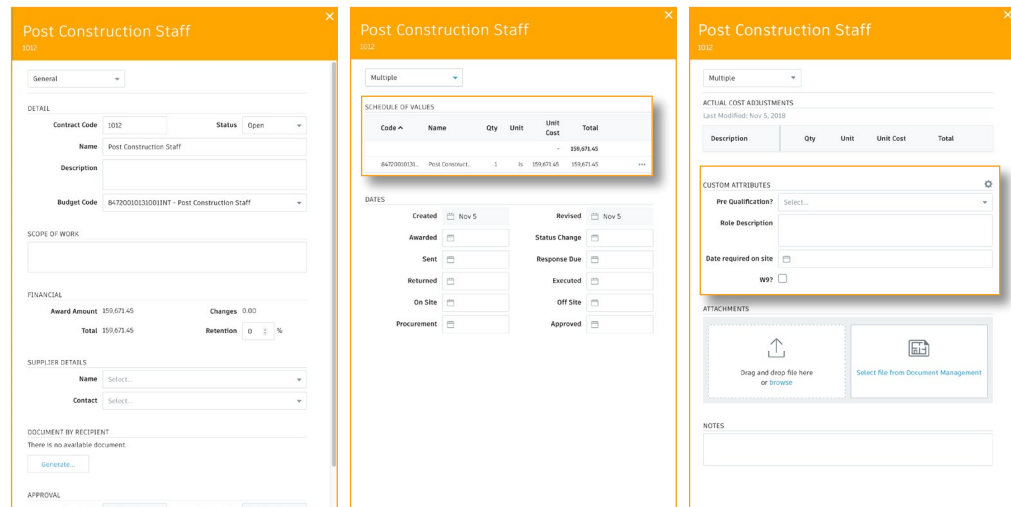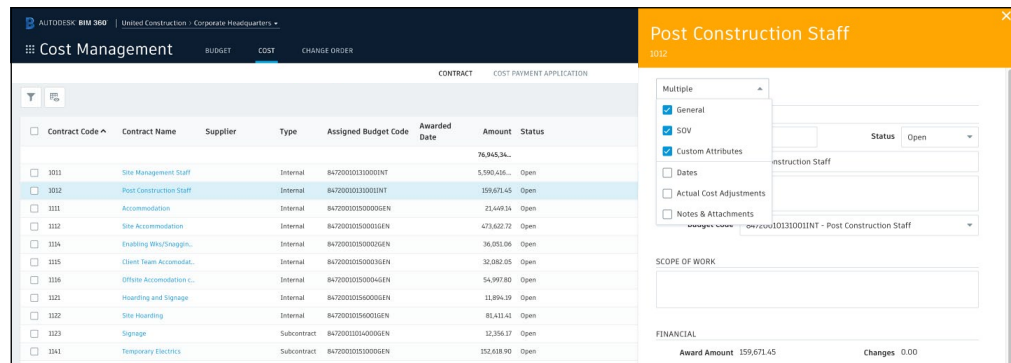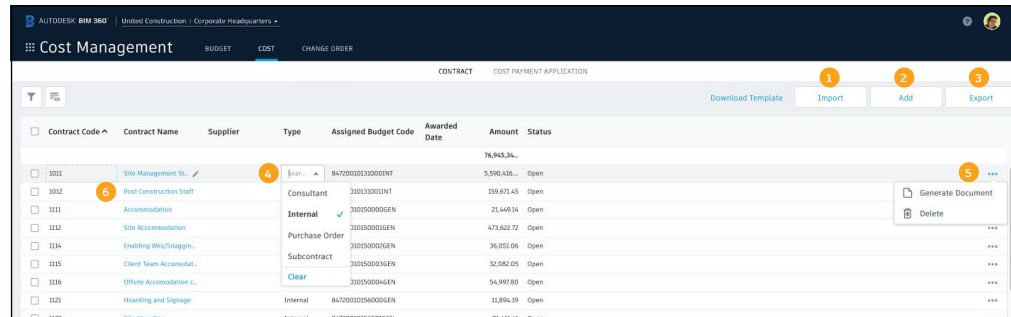
PRO TIP: If the user has view only permission they will have access to enter the edit mode. However, they will not have access to make edits.

Module Overview

5   Fundamental Forecasting

New columns have been added to the Budget & Contracts tab as the first step to incorporating forecasting functionality into Cost Management. The columns include:

- Actual Costs

- Forecast Adjustments

- Forecast to Complete

- Forecast Final Cost

- Forecast Variance

Making Forecast Adjustments

- In the line, you wish to adjust right-click within the Forecast Adjustments column or select the three dots next to the item name to access the Edit Forecast Adjustments window.

- Select "add line item" and fill in the necessary information; you can add multiple list items. To delete an item, select the three dots. Select the "x" to exit back to the tab view.

- The total adjustments will appear in the Forecast Adjustments and Forecast Variance column. The Forecast Cost to Complete and Forecast Final Cost will now reflect the change.

PRO TIP: The forecast adjustments can also be viewed in the details flyout panel by selecting the top drop-down, then "Forecast Adjustments."

Change Order Management

A typical construction project can have dozens of change orders. Improve change order tracking across the entire approval process and view details of cost item impacts as well as historical reference points with Cost Management's change order capabilities.

1 Cost Item Sub-Tab

Cost items are the individual detailed items for each budget code associated with a potential change. The typical workflow is to create a Potential Change Order (PCO) and add cost items to it. However, in the Cost Items tab within the Change Orders tab in the Cost Management Module, you can easily add cost items or edit existing cost items.

This works similarly to the contract module edit mode.

1. "Add" allows you to manually enter a cost item.

2. "Export" allows you to export a cost item report.

3. Column settings allows you to select the columns you wish to include in your view.

4. "Budget Status" is the current status of the cost item in the budget request workflow.

5. Click the link to open the 'container' for whichever part of the process the cost item is currently in.

6. Select the three dots to delete a cost item.

7. Select a cost item name to open the details flyout panel.

Change Order Management

Cost Item (Continued)

- In the details flyout panel use the drop-down to select the sections to view. Sections can be viewed individually or in a scrolling list. Creating and editing cost items will be done in the details flyout panel.

- Under "Cost Summary" you can break down the cost item into a more granular level of detail by selecting "define cost item hierarchy/breakdown."

- Existing or new cost items created directly in the cost item view can be "assigned" to a PCO by selecting the check box next to the cost item.

- Once selected an "assign" button appears. Click the drop down to assign.

- An assign window will pop up where you can type in search criteria to filter the list. Select the PCO to add the cost item.

Change Order Management

2   PCO Sub-Tab

PCO's (Potential Change Orders) are the starting point of any budget or cost change, and used to generate an RFQ, RCO, OCO, or SCO. The PCO tab is within the Change Orders tab in the Cost Management Module.

1. Select "Add" to create a new PCO.

2. "Export" allows you to export a PCO report.

3. Column settings allows you to select the columns you wish to include in your view.

4. "Scope" allows you to indicate whether the PCO is an "In" or "Out" scope change. The former meaning a cost change and the latter meaning a budget (and cost) change. It's important to include this as it will define where it's shown in the budget and contracts overview tabs.

5. "Type" allows you to select the type of PCO.

6. "Source Type" allows you to select the PCO source.

7. "Source Ref #" is the reference number associated with the type.

8. "Budget Status" is the current status of the PCO in the budget request workflow.

9. "Cost Status" is the current status of the PCO in the cost change workflow.

10. Add a cost item, generate a document, or delete the PCO by selecting the three dot menu or right clicking the PCO.

Selecting a PCO gives you the option to delete, apply a markup, or assign it to an RCO or OCO. It also allows you to generate an RFQ, RCO, OCO or SCO. Depending on the budget and cost statuses some options might be grayed out.

PRO TIP: If you see your calculated markups are out of sync select the line item and in the "Apply Markup" drop-down select the necessary markup from the list.

3 Generating an RFQ from a PCO

RFQ (Request for Quotation) are the documents you generate to solicit pricing from a supplier. This process utilizes the document templates created in the Project Admin module.

- In the PCO tab, if you want to generate a single RFQ that includes all the associated cost items, select the check-box next to the PCO or select the PCO name to open the details flyout panel. To generate individual RFQs for specific cost items in the PCO, select that line item.

- A "Generate" drop-down will appear, select RFQ. An RFQ generator window will open.

  1. Contract Code and Name are auto-populated by the related budget code.

  2. You can customize the RFQ title.

  3. Add a due date. By default due date requires a Project Admin permission level, but can be overwritten here.

  4. Edit unit cost or add a sub-item.

  5. Additional scope description will automatically be populated here from the PCO/Cost Item details flyouts, but can be edited/appended here.

  6. Select the desired document template.

  7. Search to add additional recipients. The default recipient is auto-populated based on the contract award of the same budget code the cost item is assigned.

  8. Additional files can be uploaded from your desktop or selected from the BIM 360 Document Management module.

  9. "Save" allows you to save the document in the current state and return to it later to complete.

  10. "Generate" allows you to create the document.

PRO TIP: The PCO must have a Cost Status of "Open" to be able to generate an RFQ.

PRO TIP: This utilizes the document templates capabilities set up in the Project Admin module, refer to the previous section on Document Templates.
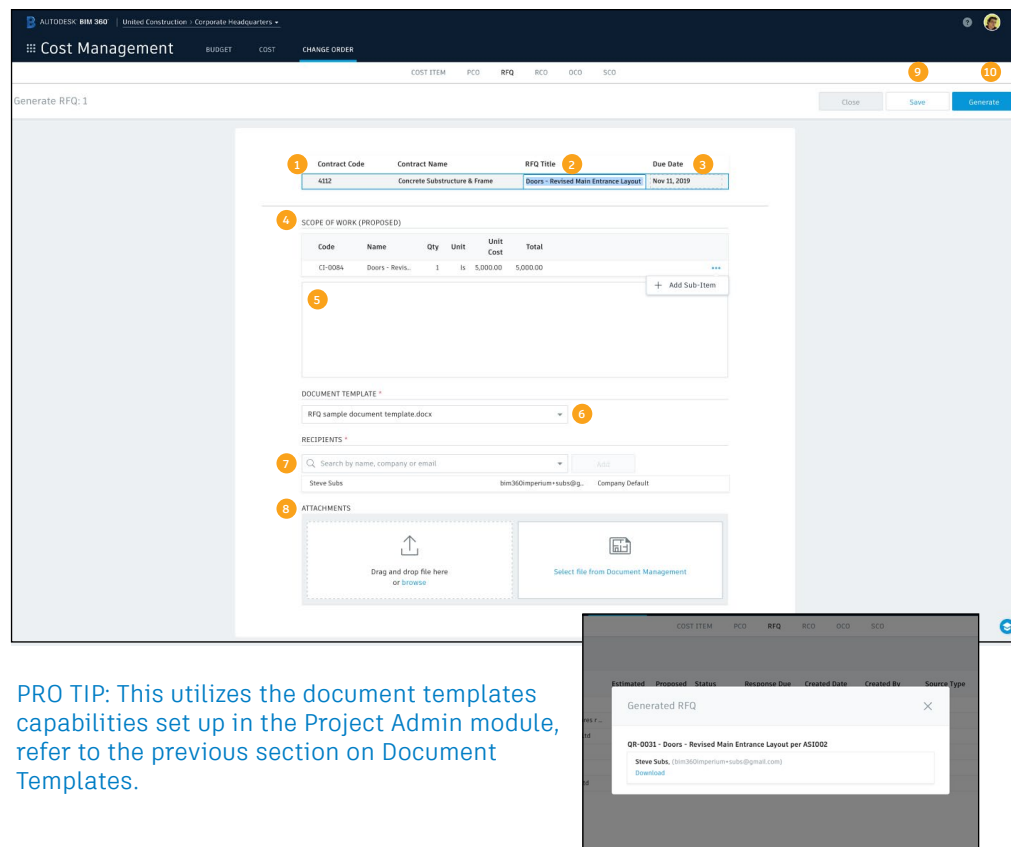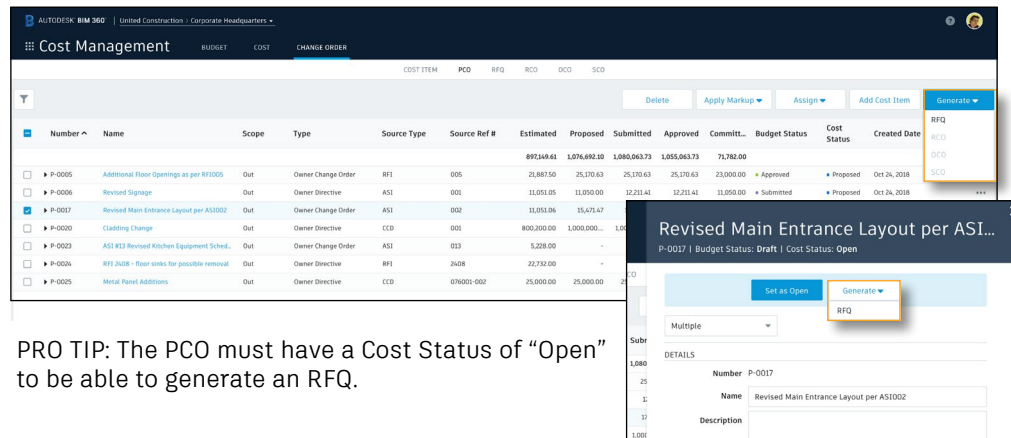
Change Order Management

4 RFQ Sub-Tab

The RFQ tab is within the Change Orders tab in the Cost Management Module.

1. "Status" auto updates to "Open" after a RFQ is generated from a PCO.
2. "Response Due" will be populated when a date is added in the dates section of the details flyout panel.
3. "Source Type" can be added by clicking to access the drop-down list.
4. "Source Ref #" allows you to manually enter a number.
5. "Detach" allows you to detach as cost item from an RFQ. It will still be part of the PCO.
6. Select the three dots to regenerate the document or delete the RFQ.
7. Select the name to open the details flyout panel.

- In the details flyout panel like the Contract module, use the drop-down list to select the sections to view. Sections can be viewed individually or in a scrolling list. Editing RFQ items can be done in this view.

- Selectable workflow- based actions (buttons) will appear to help walk you through the process. For example, when the RFQ status is "Open," you will see a "Set as Pricing" button. By selecting it the status color changes and the next options you see are "Set as Proposed" or "Set as Rejected."

- Select "SCO" to generate a Supplier Change Order. This process is similar to creating an RFQ. Fill in the information, select the document template, choose the recipient(s), attach files, and generate the document.
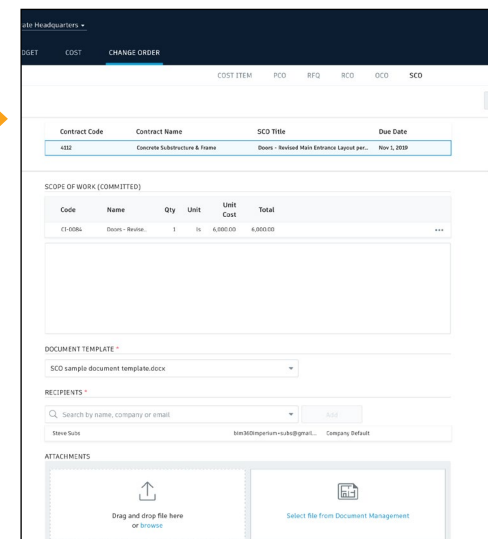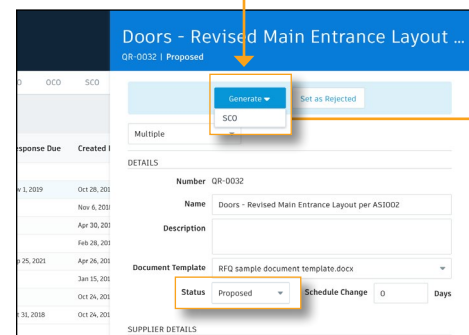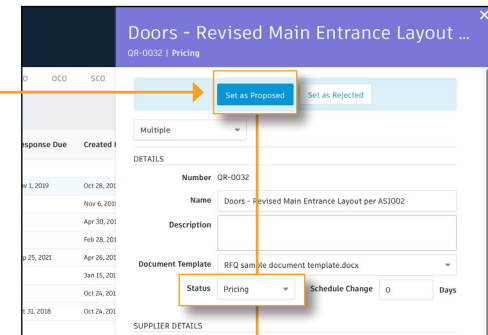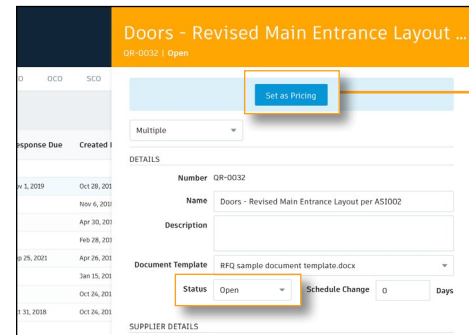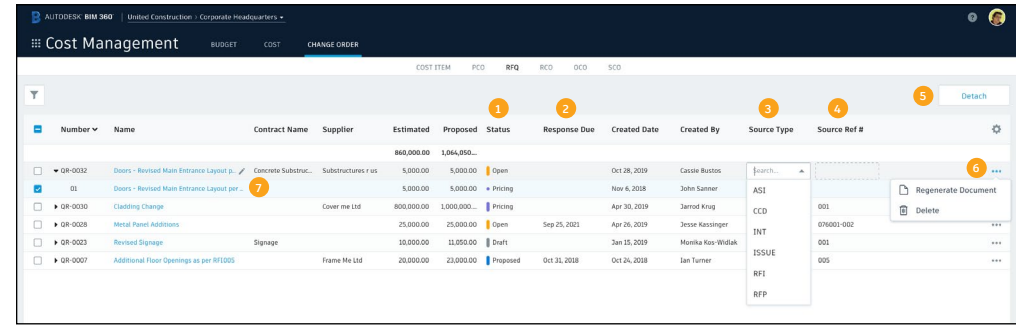
5

Generating an RCO from a PCO

RCO (Request for Change Order) are upstream budget change orders. They are a means to request a change in the contract between the Owner and the Main Contractor. Typically, the RCO created by the Main Contractor is built from one or more cost items and sent to the Owner.

- In the PCO tab, if you want to generate a RCO select the check-box next to the PCO or select the PCO name to open the details flyout panel.

- A "Generate" drop-down will appear, select RCO. An RCO generator window will open.

- Like an RFQ, scope information is auto-populated. You can select the document template, choose the recipient(s), attached files, and generate the document.

- Multiple PCOs can be rolled up into a single RCO.

- Select the check-box next to multiple PCOs you would like to generate into a single RCO. When the "Generate" drop-down appears select RCO.

- The process is the same as generating a single document. However, the RCO will be a combination of the selected PCOs. The cost items will be combined and the scope is auto-populated but can be adjusted. Select the document template and recipient.

PRO TIP: The PCO must have a Budget Status of "Open" to be able to generate an RCO.

PRO TIP: If you don't need to generate an RCO bypass this step and go straight to an OCO.

Change Order Management

6 **RCO Sub-Tab**

The RCO tab is within the Change Orders tab in the Cost Management Module.

1. "Status" auto updates to "Open" after a RCO is generated from a PCO.
2. Select the check-box next to the line item to access the delete, apply markup, assign, and generate buttons.
3. Select the three dots to regenerate the document or delete the RCO.
4. Select the name to open the details flyout panel.

- In the details flyout panel use the drop-down list to select the sections to view. Sections can be viewed individually or in a scrolling list. Editing RCO items can be done in this view.

- Again, selectable workflow-based actions (buttons) will appear to help walk you through the process. For example, when the RCO status is "Open," you will see a "Set as Submitted" button. By selecting it the status color changes and the next options you see are "Set as Accepted" or "Set as Rejected."

- Once the status is "Accepted" you will be able to generate a OCO or a SCO. Once you select the appropriate option this process is the same as generating an RFQ or RCO document.
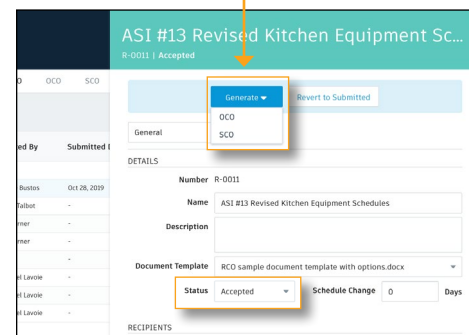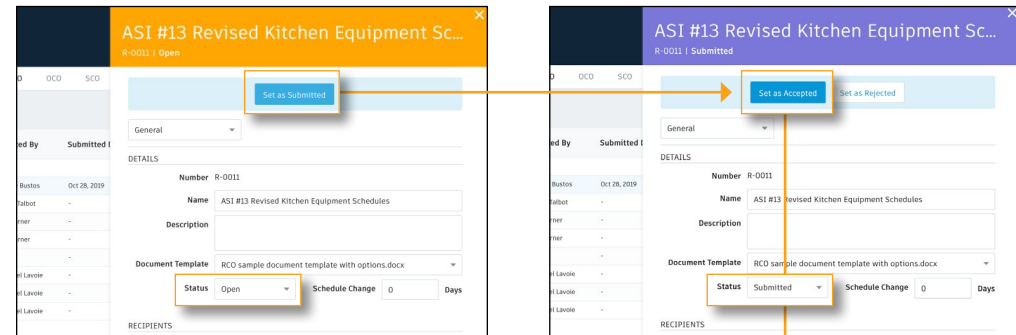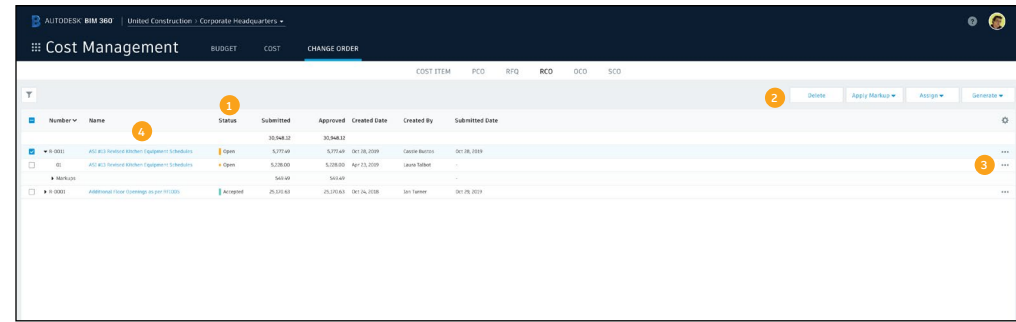
7 ## Generating an OCO from a RCO

OCO (Owner Change Order) represents a change order from the Owner to the Main Contractor/Construction Manager. These documents are built from one or many change requests (RCOs) by processing the RCOs into an OCO. The signed OCO legally amends a contract to affect a change in requirements, cost, or schedule to the previously negotiated contract.

- The RCO status must be "Accepted" to be able to generate an OCO.

- When you select "OCO" in the generate drop-down the process is the same as generating an RFQ or RCO document.

- Like an RCO, scope information is auto-populated. You can select the document template, choose the recipient(s), attached files and generate the document.

- Multiple RCOs can be rolled up into a single OCO.

- Select the check-box next to multiple RCOs you would like to generate into a single OCO. When the "Generate" drop down appears select OCO.

- The process is the same as generating a single document. However, the OCO will be a combination of the selected RCOs. The cost items will be combined and the scope is auto-populated but can be adjusted. Select the document template and recipient.

8 OCO Sub-Tab

The OCO tab is within the Change Orders tab in the Cost Management Module.

1. "Status" auto updates to "Open" after a OCO is generated from a RCO.
2. Select the check-box next to the line item to access the delete, apply markup, and generate buttons.
3. Select the three dots to regenerate the document or delete the OCO.
4. Select the name to open the details flyout panel.

- In the details flyout panel use the drop-down list to select the sections to view. Sections can be viewed individually or in a scrolling list. Editing OCO items can be done in this view.

- Again, selectable workflow-based actions (buttons) will appear to help walk you through the process. For example, when the OCO status is "Open," you will see a "Set as Submitted" button. By selecting it the status color changes and the next options you see are "Set as Approved" or "Set as Rejected."

- Once the status is "Approved" you will be able to generate a SCO. You can either generate it now or select "Set as Executed" and then generate it. The SCO generation process is the same as generating a RFQ, RCO, and OCO.

Change Order Management

9 Generating an SCO

SCO (Supplier Change Order) is a downstream cost change order which amend the original supplier contracts.

There are a few different ways you can generate an SCO:

- From a PCO with a budget status of "Open", "Approved" or "Executed" and cost status of "Open" or "Proposed."
- From an RFQ with a status of "Proposed."
- From an RCO with the status of "Accepted."
- From an OCO with the status of "Approved" or "Executed."

- To generate a single SCO consisting of all cost items associated with a 'parent' line item, select the check-box next to the parent.
- To create individual SCOs for specific cost items within a "Parent," select the box next to the cost item.
- You can also select multiple SCOs with multiple 'parents' to generate a single SCO from.
- The SCO generation process is the same as generating an RFQ, RCO, and OCO. When the document generator window opens information will be auto-populated. You can select the document template, choose the recipient(s), attach files and generate the document.

PRO TIP: If an SCO is being generated from an OCO made up of multiple RCOs the SCO will generate individual documents for each supplier affected by the change.

10 SCO Sub-Tab

The SCO tab is within the Change Orders tab in the Cost Management Module.

1. "Status" auto updates to "Open" after a SCO is generated.
2. Select the check-box next to the line item to access the delete button.
3. Select the three dots to regenerate the document or delete the SCO.
4. Select them name to open the details flyout panel.

- In the details flyout panel use the drop-down list to select the sections to view. Sections can be viewed individually or in a scrolling list. Editing SCO items can be done in this view.

- Again, selectable workflow-based actions (buttons) will appear to help walk you through the process. For example, when the SCO status is "Open," you will see a "Set as Sent" button. By selecting it the status color changes and the next option you see is "Set as Executed."

Pay Applications

Avoid risk and errors resulting from the use of disconnected cost management tools, and benefit from real-time visibility into how payments are affecting the project budget to maintain a view of the financial health of the project.

1 Creating main/prime contract(s)

Open the Cost Management module, select the Budget menu, then Main Contract tab. Note, if you have full control permission levels for this tab you can create a contract.

1. Select the edit icon.

2. In edit mode, an "Add" button will appear; select it to create a new main contract(s).

3. Type the contract code, name, and select the type drop-down.

4. Column settings allow you to select the columns you wish to include in your view.

5. The export button allows you to export the information in the Main Contract tab to Excel.

PRO TIP: After a contract is created if you wish to edit you need to be in edit mode. If you choose to delete a contract or generate a document from a contract select the three-dots after the contract name.

Pay Applications

2

Creating the main/prime contract schedule of values (SOV)

You can either manually create the SOV or automatically create it from selected items within the Budget tab.

Manually Creating the SOV:

- Select the three-dots then "Add Sub-Item."

- A new line will appear under the main contract, fill in the necessary information. You can type in a value or associate it to a budget code by selecting within the budget code column; the value will auto-populate.

Automatically Creating the SOV:

1. Within the Budget tab, select the edit icon. In edit mode, a "Create Main Contract SOV" button will appear.

2. Select the budget items you would like to associate with the main contract.

3. Click "Create Main Contract SOV."

4. Within the Create Main Contract SOV dialog box, select the main contract from the drop-down. Then choose what you want to create the SOV from; when done, click "Create."

5. The main contract SOV will now be created automatically with links to the budget using the selected settings. This connection allows you to see what you will be paid and what you need to pay your Suppliers.

Manually Creating the SOV:
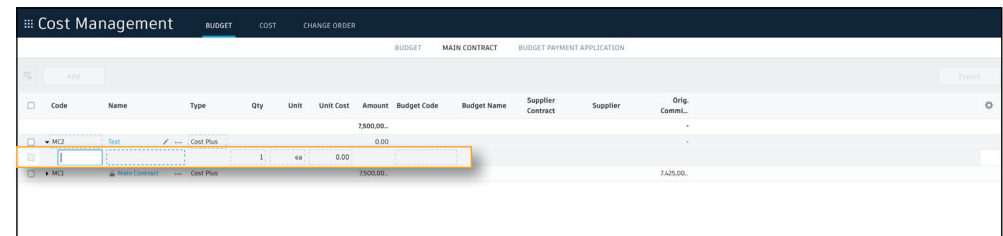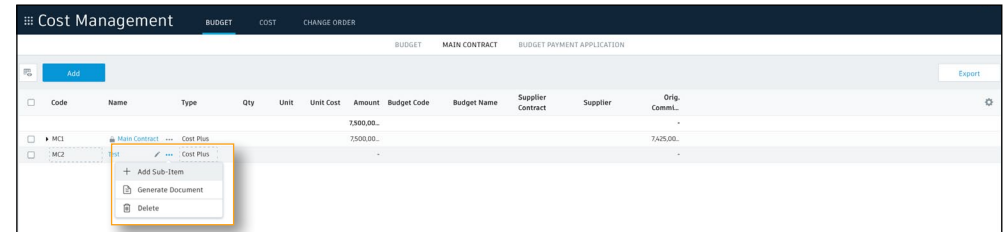
Automatically Adding the SOV:
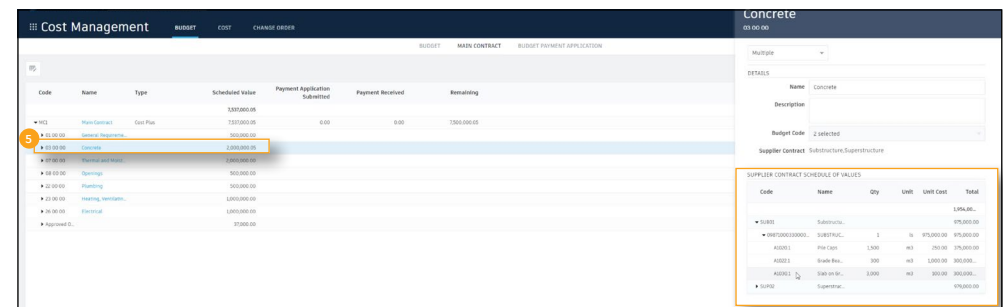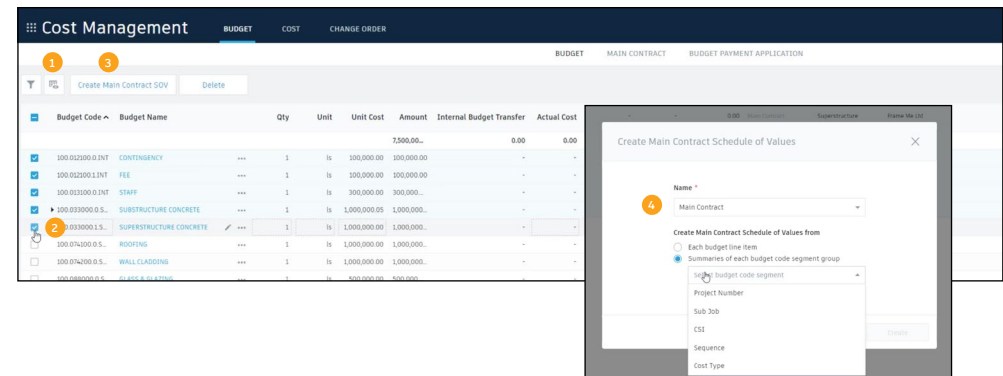
Pay Applications

3

Creating billing periods/master schedule

You can either setup your billing periods from the main contracts details flyout panel or within the Budget Payment Application tab.

From Main Contract Details Flyout Panel:

- Select the main contract to open the details flyout panel. Within the panel, scroll to the Master Schedule section and select the "Manage" button.

- In the Manage Master Schedule dialog box, you can either copy billing periods from another main contract using the drop-down menu or manually create new periods.

- Once your billing periods are created, you can manage them within the details flyout panel under the Master Schedule section. In this view, you can also see payment application statuses and amounts for each period.
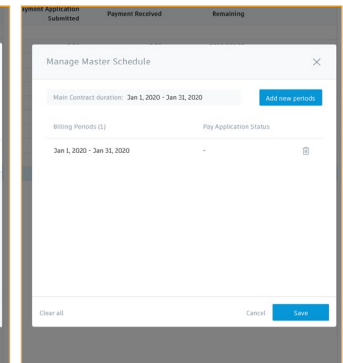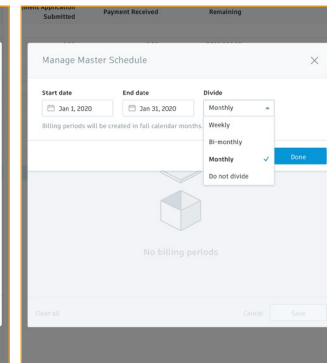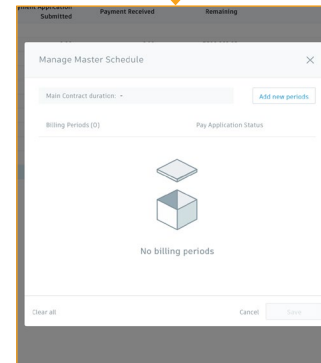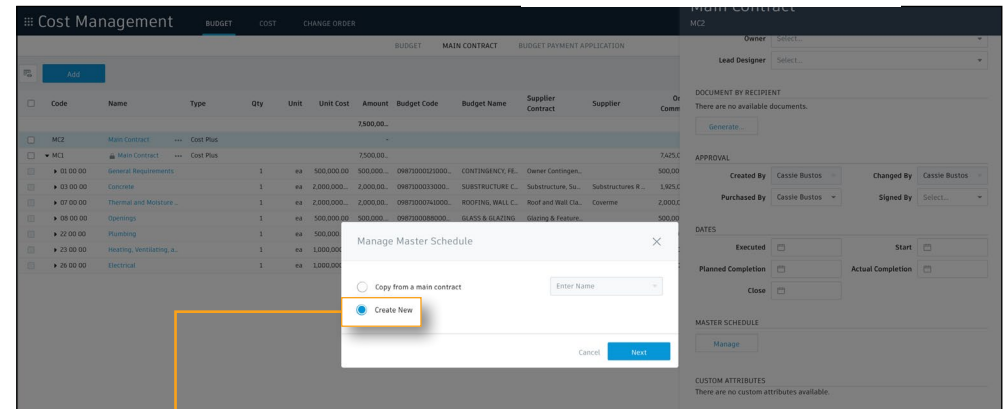
From Budget Payment Application Tab:

- Select the "Set up master schedule" button. Within the Manage Master Schedule dialog box, follow the same step as above.
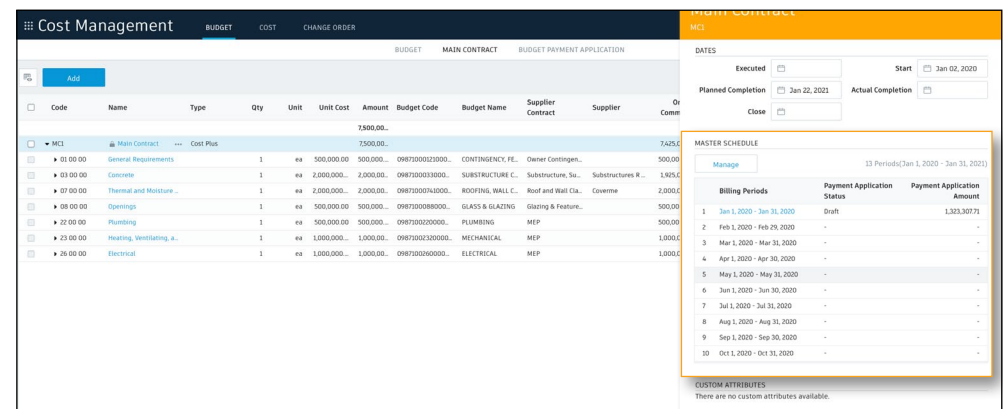
Pay Applications

4

Managing Cost Payment Applications

Supplier payment applications can be managed from the Budget Payment Application tab within the Budget menu. They can also be managed in the Cost Payment Application tab within the Cost menu.

From Budget Payment Application Tab:

1. Use the drop-down menu to select the main contract.

2. Use the drop-down menu to choose the correct billing period or use the arrows to navigate between periods.

3. Select "View" next to Associated Cost Payment Applications. This will open the main contract details flyout panel.

4. In the Associated Cost Payment Application section, select "Create" to create a brand new cost payment application or select "Add existing" to connect an existing application to the contract.

5. Once created, the number of cost payments associated to the main contract will auto populate next to Associated Cost Payment Applications.

6. The cost payment application(s) will appear within the Associated Cost Payment Application section of the details flyout panel.

7. To update the cost payment application information, select the cost payment application billing period. This will take you directly to the cost payment application.

Create New: use the drop-down menu to select the suppler.

Add Existing: select the cost pay application from the provided list.

Pay Applications

Managing Cost Payment Applications (continued)

From Cost Payment Application Tab:

1. Use the drop-down menu to select the appropriate supplier.

2. Select "set up billing periods" and choose the appropriate option. If you decide to create from new, follow the same steps covered in section 3, "Creating billing periods/master schedule."

3. Choose the correct billing period or use the arrows to navigate between periods.

Updating Cost Payment Application Information:

1. Click within the table to make necessary updates. The system will automatically update to reflect the changes.

2. Use the status drop-down to update the status of the pay application.

3. To export to Excel, select the Export button. This is useful if someone does not have access to the system. They can populate data into the yellow highlighted area; then, you can import the information back into the system.

4. To import data select the Import button.

5. To delete the pay application or allow overbilling, click the three-dot menu to access the options.

6. Approved Supplier Change Orders (SCO) will automatically be added based on the approved date. If you don't see one, select "Add change orders" to manually insert it.

Pay Applications

Managing Cost Payment Applications (continued)

Cost Payment Details Flyout Panel:

Select the payment application name to open the detail flyout panel.

1. Use the drop-down to update the status.

2. View a concise payment application summary table.

3. View a change order summary.

4. Quickly generate or access generated documents. This feature uses Cost Management document templates capabilities.

5. Quickly view the associated budget payment application. Select the billing period to open the budget payment application.

6. Available custom attributes display within this section.

7. Use these fields to attach relevant information.

8. Include any important notes.

Cost Payment Details Flyout Panel:

5 Managing Budget Payment Applications

Owner pay applications can be managed from the Budget Payment Application tab within the Budget menu.

Budget Payment Application Tab:

1. Use the drop-down menu to select the appropriate main contract.

2. Use the drop-down menu to choose the correct billing period or use the arrows to navigate between periods.

3. Column settings allow you to select the columns you wish to include in your view.

4. To delete the pay application or allow overbilling, click the three-dot menu to access the options.

5. Change orders automatically pull into the budget pay application view.

6. If you the change order select "Add change orders" to manually insert it.

7. Use the status drop-down to update the status of the pay application.

Budget Payment Application Tab:

Managing Budget Payment Applications (continued)

Main Contract Details Flyout Panel:

Select the main contract to open the detail flyout panel.

1. Use the drop-down to update the status.

2. View a concise payment application summary table.

3. View a summary of the change orders.

4. Quickly generate or access generated documents. This feature uses Cost Management document templates capabilities.

5. Within this section, you can create or add existing cost payment applications. To quickly access the cost payment application details, select the billing period. The cost payment application will open.

6. Available custom attributes display within this section.

7. Use these fields to attach relevant information.

8. Include any important notes.

Updating Budget Payment Application Summary View:

- Within the Budget Payment Application table, select "Updated Budget Payment Application" to automatically update the summary view.

- Note, associated cost payment applications must have a status of Accepted before you see the option to update.

Main Contract Details Flyout Panel:

Updating Budget Payment Application Summary View:

Pay Applications

6 Document Generation

- Cost Management allows you to create standard documentation formats that automatically populate directly from the system. See the Document Templates chapter of this guide for details on how to access the document templates and create your own.

- For example, you can automatically generate a payment document which provides the information required to populate documents such as the AIA G702-1992 and AIA G703-1992 forms.

Example Document Generated from Cost Management:

Additional Capabilities

Account Admin

With the project administration tools in BIM 360, you can rest assured that your project information is in the right hands. Project admins can easily invite team members to the project and define their access levels on a project-by-project basis with a simple click. BIM 360 has two levels of administration to ensure security and control across your projects: Account admins and project admins. Only account admins can create new projects and assign additional account admins and project admins. Project admins can add and remove members, set permissions, and adjust project details.

1   Create a project

- In the Account Admin module, select the Projects tab and click "Add."

- Enter project information and click "Save & Continue."

Getting Started Guide 💡   **Create a Project** 💡

Create Project Profile
Step 1 of 2

* Project Name

Oakwood Medical
Project name is valid.

* Project Type

Hospital

Construction Type

New Construction

* Project Value

87000000   USD
Project value is valid.

Project Image
Select image to upload
JPEG, GIF, PNG, or BMP file
(4MB max)
Browse

Project Address

560 Dockside Avenue

Address Line 2

Boston   Postal Code

Massachusetts

Account Admin

2 | Activating modules

- Click "Activate" for the desired BIM 360 service.

- Assign a project admin for each service. You can add multiple admins.

- (Optional) For Document Management and Field you can copy existing project settings.

- An email invitation will be sent to the assigned project admin(s). They will need to click the link to join the project.

- Click "Finish."

PRO TIP: You have to activate Document Management first, before you can activate other next-gen services.

3 | Add members to directory

- In the Account Admin module select the Members tab and click "Add."

- To add an individual member, select "Add People to the Member Directory."

- To add an account admin, select "Invite Account Admins."

- To import members from a list, select "Import Members by Spreadsheet." For a first-time import, download and complete the member list template.

PRO TIP: You can change the default company and role later if necessary.

Account Admin

4 ## Adding members to a project & assigning access levels

- In the "Project Admin" module, select the "Members" tab.

- Click "Add" and use the search bar to search the member directory.

- When you find the member, select them and click "Select."

- Add their company and role. Note: Role determines their access level to all BIM 360 services.

- Click the icon(s) to overwrite the access level granted by their project role.

- Click "Add to Project."

- Update existing access levels by clicking the grayed out icon(s).

Members & Access Levels

Setup Roles

PRO TIP: You can choose from a list of preset roles or create your own custom roles as well as configure the permission and access levels by each role.

Integration Partners

Get the most out of construction technology by integrating the software you already use with BIM 360. Built on an open and secure API platform, BIM 360 enables users to easily integrate with various other construction softwares, including drone technology, estimating and bid management, as well as safety management tools.

Reality Capture	Cost Management
Estimating	Construction Management
Takeoff	Design Checking
Field Management	Layout
Bid Management	Scheduling
Accounting	Data Transfer

Learn More

3DR · SIGMA ESTIMATES · eSUB construction software

Pype · SMARTBID™

EGNYTE · hsbcad · STRATUS

SITEAWARE · assemble

ManufactOn · triax™ · hsbshare

SMARTVID.IO · RMBX RHUMBIX

HOLO BUILDER Winning by Knowing · BECKTECH INNOVATION IN ALL DIMENSIONS · ProjectReady®

AUTODESK®
BIM 360®

autodesk.com/bim-360